Mr. Potts called attention to its green and apparently living and growing condition, during midwinter, in that northern latitude, as indicating that like *Spongilla aspinosa*, of the New Jersey swamps, this species also is an "evergreen," continuing its life in the normal state throughout the year, and for this reason not needing to form "protected gemmules" in such abundance as do other species.

At the suggestion of Mr. McKay, to whose enthusiastic search we owe its discovery, the local specific name pictouensis has gladly been given to this species.—Proc. Acad. Nat. Sci. Philad., Feb. 24,

1885, p. 28.

## An Example of Samia Cecropia having a fifth Aborted Wing. By Hermann Strecker.

I have lately received from Mr. Ph. Laurent, of Philadelphia, an example of Samia Cecropia, bred by him from a cocoon, having an aborted, or rather the portion of a third primary. It is a male of the ordinary size, expanding about  $5\frac{1}{2}$  inches, and is one of those smoky varieties in which the red portion of the transverse bands on the wings is very much narrowed. The right primary and both secondaries are normal in shape and marking. The left primary is in length from base to apex exactly the same as is the right; but in width from inner angle across to the costa it is  $\frac{3}{16}$  inch less; the markings are the same, allowing for a little condensing owing to the difference in the width. The venation is normal in all the wings; the left primary is also somewhat narrower at the base where it joins the body: the inner margin is in exact line with that of its fellow, thus causing the wing at costa, where it joins the thorax, to be further in from the collar and head than its opposite.

The third primary, or rather portion of a primary, emerges from the side of the collar, and consists mainly of the costal and subcostal nervures, a small part of the median nervure, and a strip of wing about a quarter of an inch wide; but the latter was much curled and twisted in drying, and does not show this width fully. Its length is about two thirds that of the normal wing, with which it runs parallel, but it is in no way visibly connected therewith.

This form of monstrosity is apparently of exceedingly great rarity. I have heard of only three other instances—those recorded by Prof. Westwood in the Trans. Ent. Soc. Lond. 1879, pp. 220, 221, in which three diurnals are described, each possessing a third aborted right-hand secondary. In one of them, an example of Gonepterys Rhamni, the normal right wing is much less than the left, the same with the second example, a Vanessa Urticæ, leading to the conclusion in those cases, as with the Cecropia, that the abnormal wing was produced at the expense of the normal.

In the two cases just cited, the extra wing is joined at the base of the costa to the proper wing; in the third case mentioned by Prof. Westwood, it is apparently a streak or strip, as it were, on the inferior surface of right secondary, distinguished from the rest of the wing, or the part thereof, by the difference in colour and mark-

ing alone.

It will be noticed in the case of the three diurnals, that the extra wing is always a right secondary, whilst in the *Cecropia* it is a left primary.—*Proc. Acad. Nat. Sci. Philad.* 1885, p. 26.

New Rhizopoda of the deep-water Fauna of the Lake of Geneva. By Dr. Henri Blanc.

In 1879 Prof. Du Plessis noted\* three species of Rhizopods obtained by him and M. Kursteiner in mud from a depth of 45 metres off the Mole of Ouchy, namely, Amceba princeps, Duj., A. terricola, Greef, and Difflugia proteiformis, Ehr. The author has made his investigations in the same locality, but at a greater depth, namely from 70 to 120 metres, partly by dredging and partly by sinking glass-plates and leaving them for some weeks to get covered with the mud. He obtained eight species not taken by Prof. Du Plessis. Prof. Forel and the author also procured another species off Morges, and this brings the number of known deep-water Rhizopods of the Lake of Geneva to twelve, of which the author gives the following list:—

1. Amaba proteus, Leidy, = A. princeps, Duj. Very common.

2. — verrucosa, Ehr., = A. terricola, Duj. Frequent.

3. — radiosa, Ehr. Rare.

4. Difflugia pyriformis, Perty. Frequent.

5. — urceolata, Carter. Rare.

6. — globulosa, Duj., = D. proteiformis, Ehr.

7. Hyalosphenia cuneata, Stein. Very rare. 8. Arcella vulgaris, Ehr. Pretty common.

9. Centropyxis aculeata, Stein. Pretty common.

10. Pamphagus hyalinus, Leidy. Very rare. 11. Actinophrys sol, Ehr. Very frequent.

12. A large *Difflugia* found off Morges by Prof. Forel and the author, probably a new species.

The author remarks that the whole of the above Rhizopods have been observed by Leidy in the surface-waters of the United States, which gives them a very wide geographical distribution; and, further, that the species indicated as rare by Leidy are so also in the deep waters of the lake.—Bull. Soc. Vand. Sci. Nat. sér. 2, vol. xx. p. 287.

## On the Nervous System of the Bothriocephalidæ. By M. J. Niemiec.

The author has investigated several scolices of Bothriocephalus latus and also of a species parasitic in the dog. He has employed the method of sections.

Following the series of transverse sections the sixth from the free extremity of the scolex presents, near the middle, some irregular clear spots, and following the descending series these spots are

\* "Matériaux pour servir à l'étude de la faune profonde du lac Leman," in Bull. Soc. Vaud. Sci. Nat. vol. xvi. p. 166.